

A Tabu Search-Based Algorithm For The Fuzzy Clustering Problem

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Summary

The Fuzzy Clustering Problem (FCP) is a mathematical program which is difficult to solve since it is nonconvex, which implies possession of many local minima. The fuzzy C-means heuristic is the widely known approach to this problem, but it is guaranteed only to yield local minima. In this paper, we propose a new approach to this problem which is based on tabu search technique, and aims at finding a global solution of FCP. We compare the performance of the algorithm with the fuzzy C-means algorithm. (C) 1997 Pattern Recognition Society. Published by Elsevier Science Ltd.

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